

WHAT IS CLAIMED IS:

1. (Currently Amended) An arrangement A multi-rotor motor structure having hermetically separated first and second modules, wherein

the first module comprises an electronically commutated external-rotor motor (20), which motor comprises having an internal stator (22) that is arranged on a bearing tube (30) and that is separated by a first air gap (24) from an external rotor (26; 92), which latter comprises a rotor cup (40), forming part of said external rotor, that is open at one end and is joined at its other end to a shaft (46) that is journaled in the bearing tube (30),

further having a permanent-magnet arrangement (76), arranged at the open end of the rotor cup (40), for magnetic interaction with a second permanent-magnet rotor (92) forming part of said second module and rotatably journaled in the arrangement motor structure, which permanent-magnet arrangement (76) is separated from that second rotor (92) by a second air gap and forms with it a magnetic coupling (94), so that a rotation of the permanent-magnet arrangement (76) brings about a rotation of that second rotor (92), and having a non-ferromagnetic separating element (82) arranged in the second air gap, which wherein:

said separating element hermetically separates the second rotor (92) in liquid-tight fashion from the external-rotor motor (20); and on which element are arranged an arrangement

said separating element is formed with a support (106) for journalling the second rotor (92), as well as with a support for the bearing tube (30; 134) for journalling the shaft (46; 46') of the rotor cup (40);

said separating element seals off a rotor-cup-remote end of said bearing tube (30); and

said shaft (46; 46') of said rotor cup (40) is secured (54, 59) against axial removal from said bearing tube (30).

2. (Currently Amended) The arrangement motor structure according to claim 1,

wherein said first module serves as a drive motor of a fan, and fan blades (64) are arranged on the external rotor (26).

3. (Currently Amended) The arrangement motor structure according to claim 2, wherein

the fan blades (64) are joined to the rotor cup (40) by plastic injection molding.

4. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1, wherein

the permanent-magnet arrangement (76) arranged at the open end of the

rotor cup (40) comprises plastic-matrix magnet material.

5. (Currently Amended) The arrangement motor structure according to claim 4, wherein

the plastic-matrix magnet material (76) is joined to the rotor cup (40) by plastic injection molding.

6. (Currently Amended) The arrangement motor structure according to claims 3 and 5,

wherein the permanent-magnet arrangement (76) made of plastic-matrix magnet material, and the fan blades (64), are manufactured in successive process molding steps using the so-called 2K procedure.

7. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1,

wherein the non-ferromagnetic separating element (80, 82, 84) is manufactured from plastic.

8. (Currently Amended) The arrangement motor structure according to any of the preceding claims claim 1, wherein

the non-ferromagnetic separating element (80, 82, 84) is approximately cup-shaped and has, on its side facing toward the external-rotor motor (20), no passage for liquid.

9. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1, further comprising

wherein fan blades (64) that, during operation, rotate within a fan housing (68) and are arranged on the external rotor (26); and wherein

the fan housing (68) is joined to the non-ferromagnetic separating element (80, 82, 84) via a plurality of struts (114, 116, 118).

10. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1, wherein

the non-ferromagnetic separating element (80, 82, 84) is joined in liquid-tight fashion, on its side facing away from the external-rotor motor (20), to a cover-like part (88).

11. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1, wherein

the second rotor (92) is joined coupled to a pump element (90; 99).

12. (Currently Amended) The arrangement motor structure according to claim 11, wherein

the second rotor (92) is implemented integrally with at least one part of the pump element (90; 99).

13. (Currently Amended) The arrangement motor structure according to any of the preceding claims, claim 1, wherein the second module comprises: a conveying wheel (90) of ~~the~~ a pump; is joined to a shaft (106) which rotates during operation and is coupled to said conveying wheel (90); and with which a bearing tube which is associated with said shaft of said conveying wheel, in order to journal it said shaft (106).

14. (Currently Amended) The arrangement motor structure according to claim 1, any of the preceding claims, wherein the internal stator is sealed in fluid-tight fashion and is arranged in the fluid conveyed by the pump rotor (92), and is in direct interaction with the pump rotor (92) in order to drive it during operation.

15. (Currently Amended) The arrangement motor structure according to claim 14, wherein the pump rotor (92) is in interaction, via an air gap, with the fan wheel (64) in order to drive the latter during operation in the manner of a magnetic coupling.

16. (New) The motor structure according to claim 1, further comprising

a sintered bearing (130) supporting said shaft (46') of said external rotor (26), said bearing being supported, in turn, in a fitting (134) arranged on said separating element (80', 82).

17. (New) The motor structure according to claim 16, further comprising, adjacent a free end of said shaft (46') extending from said sintered bearing (130), a securing element (59') which secures said shaft against removal from said sintered bearing.

18. (New) The motor structure according to claim 16, wherein a well (109) is defined, surrounding said free end of said shaft (46').

19. (New) The motor structure of claim 14, further comprising a coil former (140) for said internal stator (22'), serving to support a bearing tube (132) for said rotor shaft.

20. (New) The motor structure of claim 16, wherein said bearing tube (132) is formed on its outer surface with ribs configured to deform during insertion of said bearing tube (132) into said fitting (134).

21. (New) The motor structure of claim 1, further comprising two rolling bearings (48, 50), each having a respective inner ring (48i, 50i) and a respective outer ring (48e, 50e), supporting said shaft (46) of said external rotor (26; 92) for rotation and axial movement therein, and an annular spacer (52) located axially between said outer rings (48e, 50e).

22. (New) The motor structure of claim 21, further comprising a securing element (59) which, in an assembled configuration, rests against the inner ring (50i) of an adjacent rolling bearing (50).

23. (New) The motor structure of claim 22, further comprising a spring (58) which provides a preload against an inner ring (50i) of an adjacent rolling bearing (50).

24. (New) The motor structure of claim 21, further comprising a securing element (54) which secures an outer ring (48e) of one of said rolling bearings within bearing tube (30).